Shelter - Garment

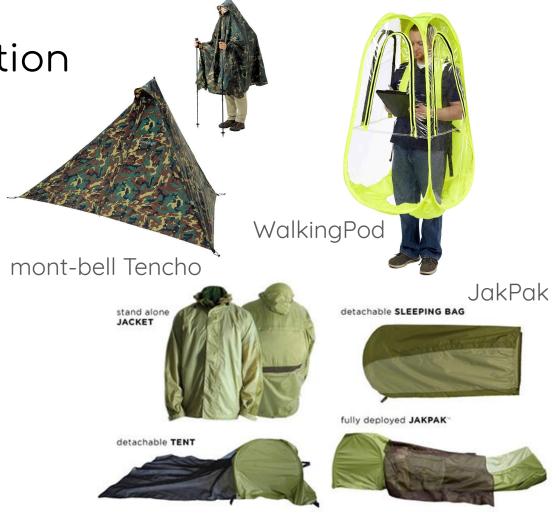
Design Concept by Cyrin Gutmacher

Preliminary Concept

I was interested in the idea of creating a shelter that could also be worn as a garment, and was easily convertible between the two different uses.

Based on the research and experiments done previously in class, I was inspired by the lightweight yet rigid structure of consumer-grade as well as DIY tents, and began my research with these before seeking out existing wearable options. Functional Inspiration

I was surprised to find a number of existing solutions to this seemingly unique design direction and began delving into the range of options already on the market, utilizing both traditional tent construction as well as more unorthodox material combinations.



Functional Inspiration



Naturehike "Human-Shaped" Sleeping Bag







Margiela Artisanal Duvet Coat - 1999

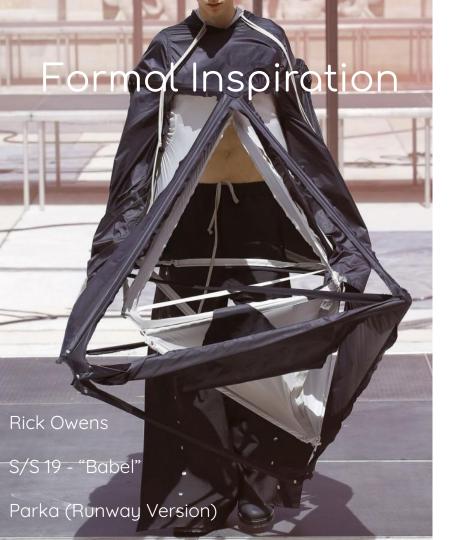






Formal Inspiration







Material Information

After amassing a wide range of aesthetic and construction inspiration, I returned to a structural study I had created earlier in the semester as a potential direction for the "Support a Person" project.

This study combined a fiberglass rod with a strip of nylon webbing, sewn at either end to secure the tension in both the rod and the webbing.



Construction Process

Expanding on this construction, I traced the hollow interior form onto fabric, and created a series of loops around the perimeter, maintaining a steady tension throughout the fabric and along the rod.

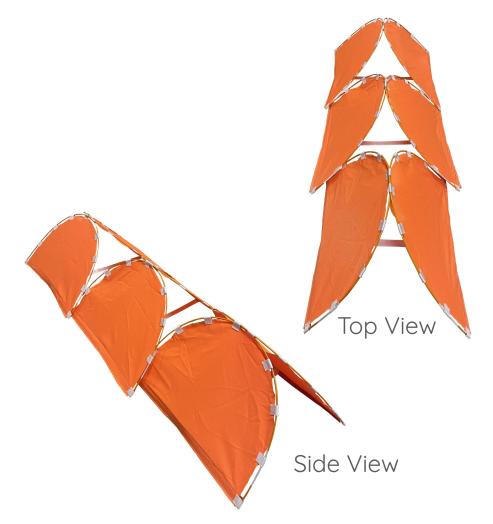
The end loops were again sewn shut and another strip of webbing was added along the base to increase the strength and rigidity of the fabric.



Shelter Form

After creating a series of these taught fabric forms, I interwove the rods through the top loop of each pair, and defined the separation difference with another strip of webbing attached at the mid-base of each corresponding unit.

This creates the skeleton structure for the shelter.



Garment Form

With these paired structures now establishing volumes, I could begin to define what a garment may look like utilizing them.

Attached on either end with removable, high-tensioned springs; the garment sits around the user's body, with the distance strips redefined as shoulder straps to maintain space between the top of the garment and the user's head.

